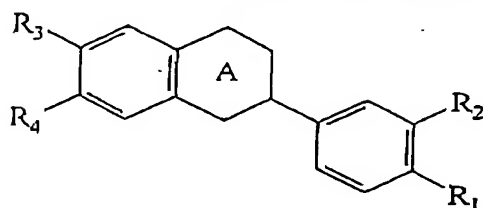
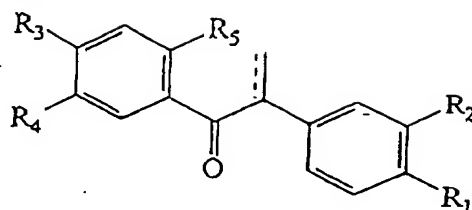


Claims

1. A compound of formula I or formula II



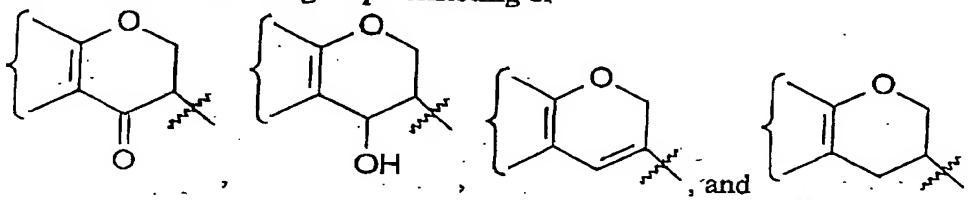
(I),



(II)

in which

A is selected from the group consisting of



one of R_1 and R_2 is selected from H, OH and OCH_3 , and the other of R_1 and R_2 is selected from OH and OCH_3 ;

one of R_3 and R_4 is selected from H, OH and OCH_3 , and the other of R_3 and R_4 is selected from OH and OCH_3 ;

provided that at least one of the pairs R_1 , R_2 and R_3 , R_4 are both OH;

R_5 is selected from OH and OCH_3 ; and

--- denotes a single or double bond;

or a pharmaceutically acceptable salt or prodrug thereof;

with the proviso that

(a) when A is or and R_3 and R_4 are both OH then R_2 is other than H; and

(b) when A is and R_3 and R_4 are both OH and R_2 is OCH_3 , then R_1 is other than H or OCH_3 .

2. A compound according to claim 1, wherein

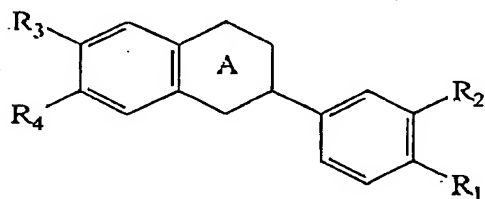
one of R_1 and R_2 is selected from H and OH, and the other of R_1 and R_2 is OH;
one of R_3 and R_4 is selected from H and OH, and the other of R_3 and R_4 is OH;

provided that at least one of the pairs R_1 , R_2 and R_3 , R_4 are both OH;

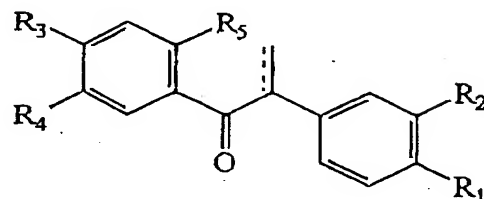
R_5 is OH; and

----- denotes a single or double bond.

3. A compound according to claim 1 of the formula (IA) or (IIA)



(IA),



(IIA)

wherein A is as defined in claim 1;

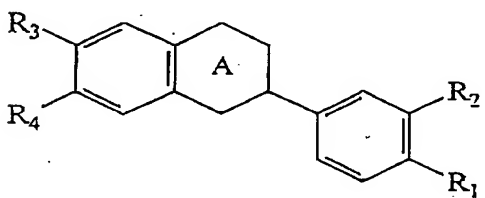
R_2 is H, and R_1 is selected from OH and OCH_3 ;

R_3 and R_4 are each OH;

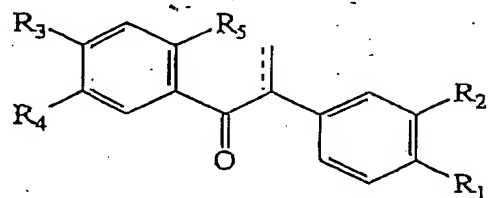
R_5 is selected from OH and OCH_3 ; and

----- denotes a single or double bond.

4. A compound according to claim 1 of the formula (IB) or (IIB)



(IB),



(IIB)

wherein A is as defined in claim 1;

R_1 and R_2 are each OH;

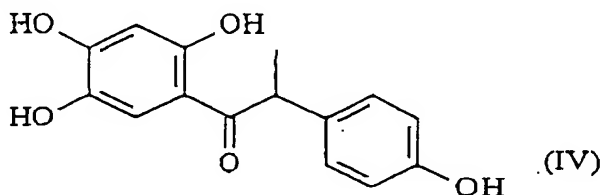
R_3 is H, and R_4 is selected from OH and OCH_3 ;

R_5 is selected from OH and OCH_3 ; and

----- denotes a single or double bond.

5. A compound according to claim 1 which is 5-hydroxy-O-demethylangolesin (5-hydroxy-O-Dma) [1-(2,4,5-trihydroxyphenyl)-2-(4-hydroxyphenyl)-propan-1-one]

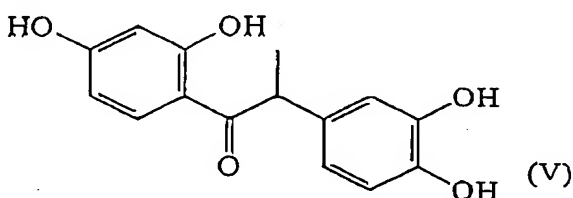
having the structure (IV):



(IV)

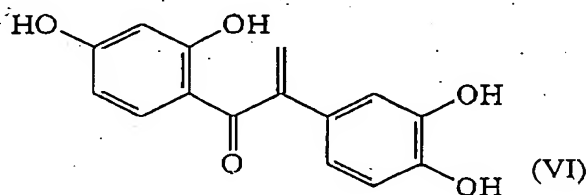
or a pharmaceutically acceptable salt or prodrug thereof.

6. A compound according to claim 1 which is 3'-hydroxy-O-demethylangolesin (3'-hydroxy-O-Dma) [1-(2,4-dihydroxyphenyl)-2-(3,4-dihydroxyphenyl)-propan-1-one] having the structure (V):



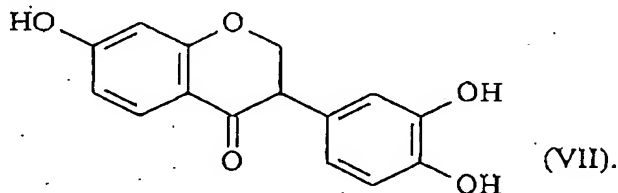
or a pharmaceutically acceptable salt or prodrug thereof.

7. A compound according to claim 1 which is 3'-hydroxy-O-demethyldehydroangolesin (3'-hydroxydehydro-O-Dma) [1-(2,4-dihydroxyphenyl)-2-(3,4-dihydroxyphenyl)-prop-2-en-1-one] having the structure (VI):



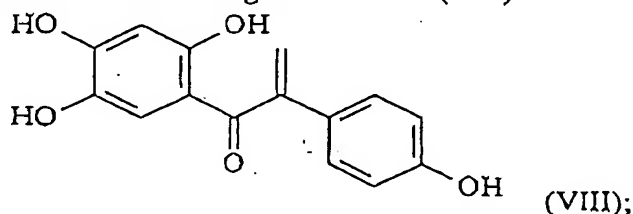
or a pharmaceutically acceptable salt or prodrug thereof.

8. A compound according to claim 1 which is 3'-hydroxy-dihydrodaidzein having the structure (VII):



or a pharmaceutically acceptable salt or prodrug thereof.

9. A compound according to claim 1 which is 1-(2,4,5-trihydroxyphenyl)-2-(4-hydroxyphenyl)-prop-2-en-1-one having the structure (VIII):



or a pharmaceutically acceptable salt or prodrug thereof.

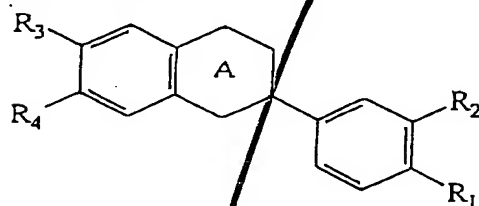
10. A pharmaceutical composition comprising one or more compounds according to claim 1, in association with one or more pharmaceutically acceptable carriers, adjuvants, diluents and/or excipients.

11. A food or drink composition, which contains one or more compounds according to claim 1.

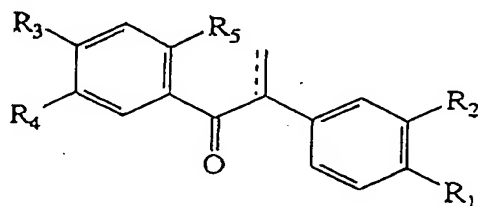
12. A method for the treatment, prophylaxis, amelioration, defence against, and/or prevention of a condition selected from the group consisting of menopausal syndrome; osteoporosis; rheumatic diseases; atherosclerosis; premenstrual syndrome; coronary artery spasm; vascular diseases; Buerger's Disease; migraine headaches; hypertension; benign prostatic hypertrophy; cancer; Alzheimers disease; inflammatory diseases; baldness; psoriasis; acne; and diseases associated with oxidant stress; in a patient in need of said treatment, prophylaxis, amelioration, defence against, and/or prevention, which method comprises administering to said patient a therapeutically effective amount of one or more compounds according to claim 1, either alone or in association with one or more pharmaceutically acceptable carriers, diluents, adjuvants and/or excipients.

13. A method for the treatment, prophylaxis, amelioration, defence against, and/or prevention of a hormone-dependent condition in a patient in need of said treatment, prophylaxis, amelioration, defence against, and/or prevention, comprising administering to said patient a therapeutically effective amount of one or more compounds according to claim 1, either alone or in association with one or more pharmaceutically acceptable carriers, diluents, adjuvants and/or excipients.

14. A method for the treatment, prophylaxis, amelioration, defence against, and/or prevention of a hormone-dependent condition in a patient in need of said treatment, prophylaxis, amelioration, defence against, and/or prevention, comprising administering to said patient a therapeutically effective amount of one or more compounds of formula I or formula II



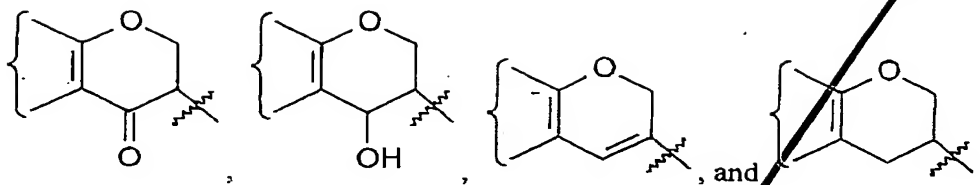
(I),



(II)

in which

A is selected from the group consisting of



one of R_1 and R_2 is selected from H, OH and OCH_3 , and the other of R_1 and R_2 is selected from OH and OCH_3 ;

one of R_3 and R_4 is selected from H, OH and OCH_3 , and the other of R_3 and R_4 is selected from OH and OCH_3 ;

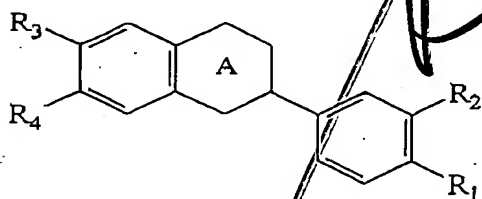
provided that at least one of the pairs R_1, R_2 and R_3, R_4 are both OH;

R_5 is selected from OH and OCH_3 ; and

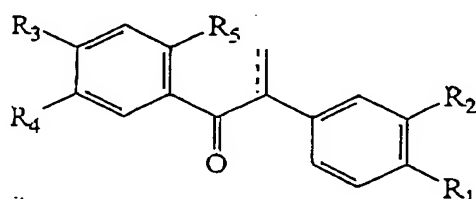
----- denotes a single or double bond;

or a pharmaceutically acceptable salt or prodrug thereof; said compound or compounds being administered either alone or in association with one or more pharmaceutically acceptable carriers, diluents, adjuvants and/or excipients.

15. A method for the treatment, prophylaxis, amelioration, defence against, and/or prevention of cancer in a patient in need of said treatment, prophylaxis, amelioration, defence against, and/or prevention, comprising administering to said patient a therapeutically effective amount of one or more compounds of formula I or formula II



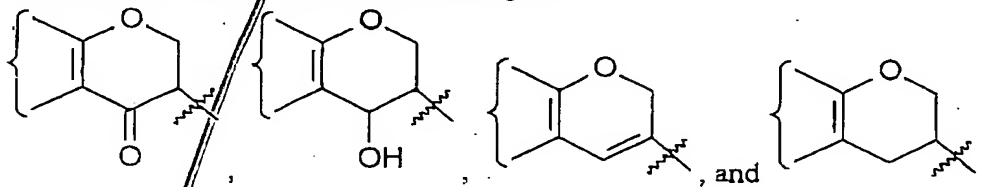
(I),



(II)

in which

A is selected from the group consisting of



one of R_1 and R_2 is selected from H, OH and OCH_3 , and the other of R_1 and R_2 is selected from OH and OCH_3 ;

one of R_3 and R_4 is selected from H, OH and OCH_3 , and the other of R_3 and R_4 is selected from OH and OCH_3 ;

provided that at least one of the pairs R_1, R_2 and R_3, R_4 are both OH;

R₃ is selected from OH and OCH₃; and

---- denotes a single or double bond;

or a pharmaceutically acceptable salt or prodrug thereof; said compound or compounds being administered either alone or in association with one or more pharmaceutically acceptable carriers, diluents, adjuvants and/or excipients.

16. A method according to claim 13 or 14 wherein said hormone dependent condition is selected from the group consisting of hormone dependent cancers, hormone dependent cardiovascular disorders and hormone dependent menopausal disorders.

17. The use of one or more compounds according to claim 1 for the manufacture of a medicament for the treatment, amelioration, defence against, prophylaxis and/or prevention of one or more conditions selected from the group consisting of menopausal syndrome; osteoporosis; rheumatic diseases; atherosclerosis; premenstrual syndrome; coronary artery spasm; vascular diseases; Buerger's Disease; migraine headaches; hypertension; benign prostatic hypertrophy; cancer; Alzheimer's disease; inflammatory diseases; baldness; psoriasis; acne; and diseases associated with oxidant stress.

18. Use of one or more compounds according to claim 1 for the treatment, amelioration, defence against, prophylaxis and/or prevention of one or more conditions selected from the group consisting of menopausal syndrome; osteoporosis; rheumatic diseases; atherosclerosis; premenstrual syndrome; coronary artery spasm; vascular diseases; Buerger's Disease; migraine headaches; hypertension; benign prostatic hypertrophy; cancer; Alzheimer's disease; inflammatory diseases; baldness; psoriasis; acne; and diseases associated with oxidant stress.

19. A microbial culture or a food or drink composition containing at least one microbial strain which microbial strain is capable of producing one or more compounds according to claim 1 from daidzein and/or glycitein.

20. A method for the treatment, prophylaxis, amelioration, defence against, and/or prevention of a hormone-dependent condition in a patient in need of said treatment, prophylaxis, amelioration, defence against, and/or prevention, comprising administering to a subject a therapeutically effective amount of 6,7,4'-trihydroxyisoflavone, or a pharmaceutically acceptable salt or prodrug thereof, either alone or in association with one or more pharmaceutically acceptable carriers, diluents, adjuvants and/or excipients.

21. The use of 6,7,4'-trihydroxyisoflavone for the manufacture of a medicament for the treatment, prophylaxis, amelioration, defence against, and/or prevention of one or more conditions selected from the group consisting of menopausal syndrome; osteoporosis; rheumatic diseases; atherosclerosis; premenstrual syndrome; coronary artery

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spasms; vascular diseases; Buerger's Disease; migraine headaches; hypertension; benign prostatic hypertrophy; cancer; Alzheimer's disease; inflammatory diseases; baldness; psoriasis; acne; and diseases associated with oxidant stress.

22. The use of 6,7,4'-trihydroxyisoflavone for the manufacture of a medicament for the treatment, prophylaxis, amelioration, defence against, and/or prevention of a hormone-dependent condition.

add A3
add A4

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